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**Jim Ruby, Executive Secretary
Environmental Quality Council**

Jay Jerde (6-2773)
Deputy Attorney General

Nancy Vehr (6-3341)
Senior Assistant Attorney General

Luke Esch (6-4155)
Assistant Attorney General
123 Capital Building
Cheyenne, WY 82002
Telephone: (307) 777-6946
Facsimile: (307) 777-3542

Attorneys for the State of Wyoming,
Department of Environmental Quality

**BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING**

IN THE MATTER OF:)
BASIN ELECTRICAL POWER COOPERATIVE)
DRY FORK STATION,) Docket No. 07-2801
AIR PERMIT CT-4631)

**ANNEX
TO THE WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY'S
MOTION FOR PARTIAL SUMMARY JUDGMENT**

Respondent, the Wyoming Department of Environmental Quality ("DEQ"), through the Office of the Attorney General of the State of Wyoming and pursuant to WYO. R. CIV. P. rule 56.1 and the DEQ Rules of Practice and Procedure, Chapter II, sections 3 and 14, hereby submits the following statement of material facts as to which the DEQ contends there is no genuine issue to be tried:

1. On November 10, 2005, Basin submitted its air construction permit application to Wyoming DEQ to construct the Dry Fork Station (DFS). The permit application starts the BACT review process in which the DEQ/AQD reviews the applicant's BACT analysis, asks questions and requests additional information. The DEQ/AQD continues reviewing information and asking questions until assured that the application is technically complete. *See Schlichtemeier Aff., Exhibit D.*
2. As a part of the application, Basin conducted an analysis of the air quality impacts on Class I areas located within 300 kilometers of the proposed DFS.

See Schlichtemeier Aff., Exhibit D at DEQ Bates No. 000138 (modeling discussion).

3. Based on the results of Basin's significance analysis at the Northern Cheyenne Indian Reservation (NCIR), a cumulative 24-hour SO₂ increment consumption analysis was conducted at the NCIR Class I area to determine whether Class I SO₂ 24-hour increment was exceeded at any receptor within the NCIR for any 24-hour period in the three years that were modeled. Three years of meteorological data were used (2001, 2002, and 2003) in these modeling analyses. *See* Schlichtemeier Aff., Exhibit D at DEQ Bates No. 000138.
4. On December 21, 2005, after completing an initial review of the Permit Application, the DEQ/AQD sent a Completeness Review for Permit Application No. 1 to Basin (Completeness Review No. 1) requesting in part that Basin address the technical feasibility and cost effectiveness of achieving more stringent SO₂, NO_x, and PM₁₀ BACT short term emission limits for the PC Boiler, and rerun the Class II PM₁₀ annual modeling analysis with a different meteorological data set and address other modeling issues. *See* Schlichtemeier Aff., Exhibit E.
5. On or about March 6, 2006, the DEQ/AQD received Basin's response to Completeness Review No. 1, including additional SO₂, NO_x and PM₁₀ BACT analyses and additional modeling information (Basin Response No.1). *See* Schlichtemeier Aff., Exhibit F.
6. On March 28, 2006, the DEQ/AQD issued its second Completeness Review (Completeness Review No. 2) requesting Basin model Colstrip Units #3 and #4 using the short-term permitted SO₂ emission rates (also referred to as "maximum allowable" or "potential to emit") for those sources, providing Basin with a 1 kilometer (km) receptor grid to be used in further modeling analyses for the NCIR, and requesting additional information on the condensable particulate emission rates from the boiler. *See* Schlichtemeier Aff., Exhibit G.
7. On May 3, 2006, the DEQ/AQD issued its third Completeness Review (Completeness Review No. 3) noting that it had reviewed Basin Response No. 1, and requesting Basin address NO_x emission levels of 0.03 lb/million British thermal units (MMBtu) and 0.035 lb/MMBtu in the BACT analysis for the auxiliary boiler, and provide a BACT analysis for mercury. *See* Schlichtemeier Aff., Exhibit H.
8. On May 30, 2006, the DEQ/AQD issued its fourth Completeness Review (Completeness Review No. 4) noting that it had further reviewed the NO_x and

SO₂ BACT analysis submitted in Basin Response No. 1, and requesting Basin address the technical feasibility and cost effectiveness of a NO_x emission level of 0.05 lb/MMBtu, 30-day average limit and a SO₂ emission level of 0.07 lb/MMBTU, 30-day average using a circulating dry scrubber (CDS) and a SO₂ emission level of 0.06 lb/MMBTU, 30-day average using wet flue gas desulfurization (FGD). *See* Schlichtemeier Aff., Exhibit I.

9. On June 14, 2006, Basin submitted its response to Completeness Review No. 2 providing additional modeling analyses and discussions of PM₁₀ emissions from the main boiler. The results of the additional modeling analyses showed that the modeled impacts based on the permitted short-term emission rates for Colstrip Units 3 and 4 exceeded the Class I SO₂ 24-hour increment at the NCIR. *See* Schlichtemeier Aff., Exhibit J at DEQ Bates No. 000632.
10. DEQ analyzed the instances in which there were modeled exceedences of the Class I SO₂ increment at NCIR and compared those impacts to the modeled 24-hour SO₂ concentrations determined from DFS's significance analysis to evaluate if the modeled exceedences occurred at receptors and time periods when the Dry Fork plant also had a significant impact at NCIR receptors. Based on this analysis, DEQ determined that DFS would not significantly contribute to any modeled increment exceedence because the modeled exceedences did not occur at receptor locations and time periods in which the modeled exceedences were predicted. *See* Rairigh Aff., at ¶ 40, *see also* Schlichtemeier Aff., Exhibit J at DEQ Bates No. 000632.
11. On July 17, 2006, the DEQ/AQD received Basin's response to Completeness Review No. 3 (Basin Response No. 3), addressing mercury (Hg) and noting that a true top down BACT analysis was not possible for three reasons: a) control technologies for mercury are still in the developmental stage; b) cost effectiveness analysis is not possible without current technology alternatives and cost information; and, c) commercially available mercury control systems and associated vendor guarantees are very limited. Basin proposed a mercury optimization study for the DFS. *See* Schlichtemeier Aff. ¶ 22, *see also* Schlichtemeier Aff. Exhibit K.
12. On June 11, 2007, the DEQ/AQD received Basin's response to our April 20, 2007 request for additional information noting that Basin had previously submitted a "Coal Power Plant Technology Evaluation for Dry Fork Station" prepared by CH2MHill (dated November 1, 2005) and was preparing an additional analysis addressing Supercritical and Ultrasupercritical boilers. *See*

- Schlichtemeier Aff., Exhibit T at DEQ/AQD Bates Nos. 004182-004240 (copy of CH2MHill evaluation)
13. On October 15, 2007, the DEQ/AQD issued its response to comments including its determination that a permit would be issued to Basin allowing construction of the DFS (DEQ Response to Comments and Decision). *See* Schlichtemeier Aff., Exhibit T.
 14. On October 15, 2007, the DEQ issued air quality construction permit No. CT-4631 (Permit) to Basin for the DFS. *See* Schlichtemeier Aff., Exhibit U.
 15. While EPA has proposed Class I SILs to be used as a tool to avoid costly analyses, the use of Class I SILs has not been finalized by EPA. However, DEQ/AQD employs the Class I SILs and associated guidance on applying the SILs to Class I issues based on the reasoning that a *de minimis* threshold is needed to screen out potentially insignificant sources. *See* Rairigh Aff., ¶ 22.
 16. Protestants' expert witness admitted that most permitting agencies use Class I SILs in the permitting process. Deposition of Khanh Tran at page 51: 15-18 (August 12, 2008).
 17. Protestants' expert witness was not aware of any permitting agency which does not use Class I SILs in the permitting process. Deposition of Khanh Tran at page 52: 20-25, 53: 1-4.
 18. Protestants' expert witness admitted that DEQ properly considered all sources of SO₂ for the SO₂ increment calculation. Deposition of Khanh Tran at page 20: 22-25, 21: 1-4.
 19. Protestants' expert witness admitted that DEQ did not improperly rely on revised modeling results supplied by the applicant. Deposition of Khanh Tran at page 20: 22-25, 21: 1-4.
 20. DEQ/AQD's BACT analysis and the range of emission limits and control measures considered in that analysis is driven by the definition of the facility proposed by the applicant. BACT is determined on a case-by-case basis. In this case, Basin proposed a mine-mouth 422 megawatt (MW)(gross)/ 385MW (net) pulverized coal-fired (PC) electric power generating unit. Therefore, the DEQ/AQD conducted a site-specific BACT analysis for DFS. *See* Schlichtemeier Aff., ¶ 34.
 21. Subcritical pulverized coal-fired electric power generating units, CFB, Supercritical, Ultrasupercritical, and IGCC sources are not control technologies, they are examples of various types of major source facilities that generate electric power. *See* Schlichtemeier Aff., ¶ 45.

22. DEQ's policy is to not require a redefinition of the source in the BACT analysis. *See* Schlichtemeier Aff., ¶¶ 34-36, ¶ 47.
23. EPA policy does not require redefinition of the source in the BACT analysis. *See* Schlichtemeier Aff., Exhibit B, at B-13.
24. EQC precedent does not require redefinition of the source. *See* Exhibit 7.
25. DEQ follows EPA's PM₁₀ Surrogate Policy. *See* Schlichtemeier Aff., ¶ 48.
26. The modeling results showed that the total PM₁₀ concentrations were below the PM₁₀ NAAQS and less than the Class II SILs both the PM₁₀ 24-hour and annual averaging periods. *See* Permit Application analysis at 12, Analysis of Public Comments at 21-22.

DATED this 2nd day of September, 2008.

FOR RESPONDENT DEQ/AQD:



Jay Jerde
Deputy Attorney General

Nancy Vehr
Senior Assistant Attorney General

Luke Esch
Assistant Attorney General
123 Capitol Building
Cheyenne, WY 82002
Telephone: (307) 777-6946
Facsimile: (307) 777-3542
Attorneys for the State of Wyoming,
Department of Environmental Quality

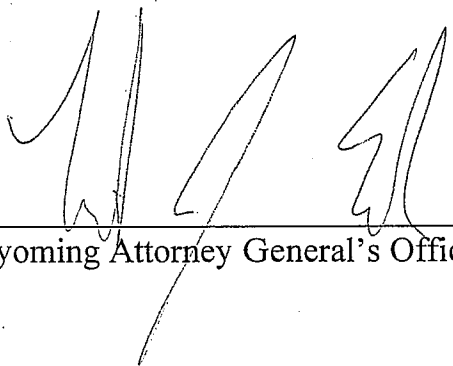
CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of the foregoing ANNEX TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY'S MOTION FOR PARTIAL SUMMARY JUDGMENT through United States mail, postage prepaid on this the 2nd day of September, 2008 to the following:

James S. Angell
Robin Cooley
Andrea Zaccardi
Earthjustice
1400 Glenarm Place, #300
Denver, CO 80202

Reed Zars
Attorney at Law
910 Kearney St.
Laramie, WY 82070

Patrick R. Day, P.C.
Mark R. Ruppert
Holland & Hart LLP
2515 Warren Avenue, Suite 450
P.O. Box 1347
Cheyenne, WY 82003-1347



Wyoming Attorney General's Office